occur at high rates in certain clinical conditions, the Centers for Disease Control recommend antichlamydial therapy—500 mg of tetracycline four times a day for seven days—for persons with those findings and for their sex partners.

Heterosexual patients with gonorrhea and their partners should be treated for chlamydial infection because about 20% of men and 40% of women with gonococcal infections also have chlamydial infection.

Other conditions that call for presumptive therapy in men are nongonococcal urethritis and epididymo-orchitis; treatment should be given for at least ten days. For women, mucopurulent endocervicitis or acute salpingitis call for antichlamydial therapy, salpingitis requiring multiple drug therapy to cover all pathogens. Again, therapy should be given for at least ten days.

Infants with inclusion conjunctivitis or *Chlamydia* pneumonia and their parents should also be treated. Erythromycin is the drug of choice for treating infants and pregnant women.

Chlamydial cultures should be used preferentially for testing persons who would not be treated on a presumptive basis. Groups benefiting from screening include young, particularly adolescent, sexually active women and pregnant women in socioeconomic circumstances that suggest a high risk for sexually transmitted disease.

Recently introduced nonculture methods may make chlamydial diagnosis more widely available and less expensive. More experience is needed, however, to assess the performance profiles of these tests to best determine how they can be used. Because all nonculture methods have some false-positive results, they should not be used for screening in low prevalence settings.

JULIUS SCHACHTER, PhD
San Francisco

REFERENCES

Prepared by the participants at a CDC workshop: Sexually transmitted disease: Treatment guidelines, 1982. Rev Infect Dis 1984; 4(suppl):S729-S746

Schachter J: Chlamydial infections (three parts). N Engl J Med 1978; 298:428-435, 490-495, 540-549

Schachter J, Grossman M: Chlamydial infections. Annu Rev Med 1981; 32:45-61

Schachter J, Stoner E, Moncada J: Screening for chlamydial infections in women attending family planning clinics—Evaluation of presumptive indicators for therapy. West J Med 1983 Mar; 138:375-379

Tam MR, Stamm WE, Handsfield HH, et al: Culture-independent diagnosis of Chlamydia trachomatis using monoclonal antibodies. N Engl J Med 1984 May 3; 310:1146-1150

Polysaccharide Vaccine for Preventing *Hemophilus influenzae* Type b Disease

A POLYSACCHARIDE VACCINE for preventing invasive diseases caused by *Hemophilus influenzae* type b (Hib) was recently licensed by the US Food and Drug Administration (Hemophilus b polysaccharide vaccine; b-Capsa I, Mead Johnson).* *H influenzae* type b is the leading cause of bacterial meningitis in the United States and an important cause of other systemic illness. An estimated 20,000 cases of *H influenzae* type b occur annually; 1 out of 200 children will have an episode of invasive *H influenzae* type b before reaching their fifth birthday. In spite of antibiotic therapy, 5% to 10% of patients die and 25% of the patients with meningitis who survive will have neurologic sequelae. The incidence of this disease is highest in young children and declines rapidly with increasing age. In two recent studies, there was a significantly increased risk of primary *H influenzae* type b in children attending day care. Children with asplenia, sickle cell disease, Hodgkin's disease and antibody-deficiency syndromes are also at increased risk of this disease.

The recently licensed Hib vaccine consists of the purified polysaccharide capsule of the organism. Like other capsular polysaccharide vaccines (meningococcal and pneumococcal vaccine), the vaccine produces minimal adverse reactions, but it is poorly immunogenic in young children. The vaccine elicits an antibody response likely to be protective in children 18 to 20 months old; geometric mean antibody titers rise with age. A prelicensure clinical trial in Finland showed 90% efficacy in children 18 to 71 months of age, but no efficacy in children younger than 18 months. There were insufficient numbers in each age category in this study to assess efficacy in children 18 to 23 months of age, although no cases occurred in the four-year follow-up of 4,000 children in this age group who received the vaccine. An efficacy trial is currently under way on a new Hib vaccine consisting of a covalently linked polysaccharide protein conjugate that may be efficacious in young children; if effective, this vaccine could be available as early as 1988. In the interim, the 25% to 35% of cases of invasive *H influenzae* type b in older children is potentially preventable by using the polysaccharide vaccine. The US Public Health Service Advisory Committee on Immunization Practices therefore recommends the universal use of the vaccine at 24 months of age; vaccination at 18 months is suggested for children at high risk of disease, including those in day care. Additional information regarding the duration of antibody response is needed to define the possible need for and timing of a second dose of vaccine in children vaccinated at 18 to 23 months. The vaccine is not recommended for children younger than 18 months. Immunizing children older than 24 months who have not yet received the type b vaccine should be based on their risk of disease. The vaccine is not recommended for preventing otitis media or upper respiratory tract disease, since these are due predominantly to unencapsulated *H influenzae*.

CLAIRE BROOME, MD
Atlanta

REFERENCES

Cochi SL, Broome CV, Hightower AW: Immunization of US children with *Hemophilus influenzae* type b polysaccharide vaccine: A cost-effectiveness model of strategy assessment. JAMA 1985; 253:521-529

Istre GR, Conner JS, Broome CV, et al: Risk factors for primary invasive *Haemophilus influenzae* disease: Increased risk from day care attendance and school-aged household members. J Pediatr 1985 Feb; 106:190-195

Peltola H, Kayhty H, Virtanen M, et al: Prevention of *Hemophilus influenzae* type b bacteremic infections with the capsular polysaccharide vaccine. N Engl J Med 1984; 310:1561-1566

Centers for Disease Control Recommendations of the Immunization Practices Advisory Committee: Polysaecharide vaccine for prevention of *Haemophilus influenzae* type b disease. MMWR 1985; 34:201-205

*Use of the trade name does not constitute endorsement by the US Public Health Service.

Preventing Low Birth Weight

INFANTS WEIGHING 2,501 grams or less at birth are 40 times more likely to die during the first four weeks of life than are infants with a normal birth weight, and they have increased risks for major and minor handicapping conditions, as well. Unfortunately, the decline between 1965 and 1980 in the infant mortality rate in the United States (from 24.7 to 13.1 per 1,000 live births) was not accompanied by a parallel decline in the rate of low-birth-weight infants. Lower infant